

Authority

Financial Assistance Award

DENALI COMMISSION 510 L Street, Suite 410 Anchorage, Alaska 99501 (907) 271-1414 (phone) (907) 271-1415 (fax) www.denali.gov

CFDA Number

90.100

Award Number	01163-02		
Award Title	Hybrid Micro Energy Program		

Recipient Organization & Address

Performance Period August 1, 2009

Cold Climate Housing Research Center PO BOX 82489

Fairbanks, AK 99708-2489

112 Stat 1854

Denali Commission Finance Officer Certification

Phone: (907) 457-3454

Recipient DUNS # 608773003

TIN # 920169929

through September 30, 2014

Cost Share Distribution Table

Accounting Code	New Funding		Prior Period Funding		Total
	Denali Commission	Other Contributors	Denali Commission	Other Contributors	Total
95670000AL	\$0.00		\$233,321.00		\$233,321.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
BP Foundation		\$0.00		\$500,000.00	\$500,000.00
State of Alaska		\$0.00		\$100,000.00	\$100,000.00
Fairbanks North Star Borough		\$0.00		\$200,000.00	\$200,000.00
		\$0.00		\$0.00	\$0.00
		\$0.00		\$0.00	\$0.00
Total	\$0.00	\$0.00	\$233,321.00	\$800,000.00	\$1,033,321.00

This Financial Assistance Award approved by the Federal Co-Chair of the Denali Commission constitutes an obligation of federal funding.

Signature of Authorized Official - Denali Commission	Typed Name and Title	Date
Electronically Signed	Mr. Joel Neimeyer Federal Co-Chair	12/17/2013

AWARD ATTACHMENTS

Cold Climate Housing Research Center

01163-02

1. Award Doc

Award Conditions to the Financial Assistance Award Between the Denali Commission and Cold Climate Housing Research Center (CCHRC) For Hybrid Micro Energy Program Award No. 1163 Amendment 2 November 2013

All changes to the award conditions are noted below.

1. Scope of Work

This amendment provides for an expansion to the scope of work to include analysis of additional, existing ground source heat pump systems in Interior Alaska, in conjunction with continued monitoring of the hybrid ground source heat pump and solar thermal system at Weller Elementary School in Fairbanks, Alaska.

The objectives for the amended scope are:

- 1. To continue to monitor the Weller heat pump to gather one year of data and use that data to calculate the efficiency (COP) of the system and the effect on the ground loop thermal regime.
- 2. To evaluate the installation of the Weller Elementary School heat pump in terms of successes and failures for retrofit systems.
- 3. To evaluate six to eight heat pump installations in the Fairbanks area with a focus on their design and performance, which will expand the lessons learned to a more generalized set of lessons for heat pumps in Interior Alaska.
- 4. To provide a lessons learned document for home owners, businesses and facility managers considering retrofitting their heating system with a ground source heat pump.

2. Award Performance Period

The amended Award performance period is August 1, 2009 through September 30, 2014. This is the period during which Award recipients can incur obligations or costs against this Award.

There are no other changes to the original Financial Assistance Award, as amended.